

SITUATION REPORT NO. 1
INCIDENT NO. 2005-033
DATE: March 11, 2005 Time: 5:00 p.m.

TO: Governor John Hoeven
State Capitol
Bismarck ND 58505

1. **NATURE OF DISASTER: Drought** - Abnormally dry to severe drought conditions exist across much of western North Dakota and will continue through the summer, based on forecasts by the National Weather Service (NWS). These conditions have and will continue to cause numerous fire emergencies and water supply shortages across western North Dakota, particularly along the Missouri River system, resulting in water supply shortages and adverse economic effects.
2. **DEATHS AND INJURIES:** No deaths or injuries have been reported.
3. **DAMAGES:** The Seasonal Outlook, issued by the Climate Prediction Center of the National Oceanic and Atmospheric Administration (NOAA), details abnormally dry to severe drought conditions continue to exist across much of western North Dakota and western South Dakota. The outlook indicates these conditions will persist, which will likely impact early spring ranching and other agricultural interests. Abnormally low snow pack in western and southern Montana and northern Wyoming will impact available runoff for streams and rivers entering the western Dakotas. Snow pack in the Rockies of Montana is well below normal for this time of year. Great Falls (0.01 inch) and Miles City (Trace), in Montana had the driest February on record. Boise, Idaho, (0.57 inch) and Great Falls (0.17 inch) and Havre (0.04 inch), Montana, had the driest two-month period for January and February. Records for some of these stations data back more than 120 years. Snow cover across the southwestern part of the North Dakota is non-existent, with snow in the northwest measuring only two to three inches. The precipitation forecast, issued by the National Weather Service (NWS), calls for normal precipitation through summer, which will not improve current drought conditions.

NWS forecaster reports soil moisture anomalies through February 23 show the western part of North Dakota, particularly south and west of the Missouri River, experiencing below normal soil moisture.

On March 11, a red flag warning was issued by the National Weather Service (NWS) for southwest North Dakota for strong winds, warm temperatures and low relative humidities. This is the second red flag warning that has been issued for the month of March by the NWS.

The city of Parshall had its Lake Sakakwea water intake extended 3,700 feet late in 2004. However, by late June 2005, it is estimated an additional 15 miles of intake pipe may be required to reach water levels necessary to provide an adequate supply of treatable water to the city. The cost may reach around \$15 million. An alternate plan to drill wells and purify water through reverse osmosis will initially cost the same but will demand much higher maintenance cost with sustained usage.

The Missouri River water intake system for the Fort Yates area has already been affected. Since late 2003, the Standing Rock Sioux Tribe has continually struggled with problems related to its intake system, primarily due to decreased levels in the Missouri River and Lake Oahe reservoir systems.

N.D. Department of Health (NDDoH) officials have been monitoring Lake Sakakawea water quality. Results of this monitoring strongly suggest there will be a loss of designated beneficial uses this year due to the loss of coldwater habitat and species. General water quality, as measured by nutrients and other parameters, will also decline. The NDDoH is concerned with municipal water supplies that meet Safe Drinking Water Act criteria to cities that are in jeopardy of losing this source of water.

In addition, record low lake levels have complicated boat access on Lake Sakakawea and virtually eliminated access on Lake Oahe in North Dakota. Work is currently underway, with technical and financial assistance through the U.S Army Corps of Engineers (USACE) Riverdale Office, to maintain 20 access sites on Lake Sakakawea. Officials for the N.D. Game and Fish Department (NDGF) and the N.D. Parks and Recreation Department (NDPR) are working with the USACE staff to address the issue.

N.D. Game and Fish Department officials anticipate losing cold water habitat needed for sustaining the population of smelt, a forage fish food base for most game fish in Lake Sakakawea. Forage numbers are currently the lowest on record. Under the latest USACE lake level projections, there will be little or no coldwater habitat available in 2005. The two-foot reduction predicted for the month of May will create an even larger challenge due to low reproduction of alternate forage fish.

On the weekend of March 5-7, 2005, the State Operations Center (SOC) was notified of three wild fires in Burleigh County. One was located south of the city of Lincoln, the second fire was at General Sibley Park, which may have

originated from a possible controlled burn and the third fire was south of the Glenwood Subdivision which threatened 40 to 50 homes. All fires were contained and extinguished, with no injuries reported.

On March 8, the State Operations Center received notification from the N.D. Health Department (NDDoH) that the Parshall water plant cannot treat the low quality water from the intake. The city reverted to the old existing wells. Water samples from these wells are being sent to Minot for testing. As a result, there was discussion as to whether a "boil order" may be required. The Parshall City Auditor and the Mountrail County Emergency Manager stated that the city reverted to the old existing wells; the city will be able to treat the water through the water treatment plant, and NDDoH officials did not see the need for issuing the "boil order."

4. RESOURCES:

LOCAL: Agencies monitoring dry conditions include county extension service officials, fire departments, dispatch centers, law enforcement, county and city public works crews, park boards and emergency management officials.

STATE: Agencies involved in monitoring drought condition reports include the Governor's Office, N.D. Fire Marshal's Office, N.D. Division of Emergency Management (NDDEM), N.D. National Guard (NDNG), N.D. Game and Fish Department (NDGF), N.D. Parks and Recreation Department (NDPR), N.D. Forest Service (NDFS), N.D. Department of Agriculture (NDDA), N.D. Department of Health (NDDoH) and N.D. State Water Commission (NDSWC).

FEDERAL: Agencies providing periodic reports include the National Weather Service (NWS) of the National Oceanic and Atmospheric Administration (NOAA), Department of Homeland Security's Federal Emergency Management Agency (FEMA), U.S. Department of Agriculture (USDA), Farm Service Agency (FSA), National Resource Conservation Service (NRCS), Bureau of Reclamation (BOR) and U.S. Army Corps of Engineers (USACE).

5. VOLUNTEER ACTION: The North Dakota Volunteers Active in Disaster (VOAD) is monitoring drought reports.

On the weekend of March 5-7, 2005, the Burleigh-Morton Chapter of the American Red Cross provided food and drinks for emergency workers fighting wild fires in Burleigh County.

6. MAJOR ACTIONS: On March 11, Governor John Hoeven issued a drought disaster and fire emergency proclamation and executive order in response to drought conditions in the Upper Missouri River Basin and other areas of North Dakota. The Governor's proclamation and executive order also provide for early implementation of the state's rural fire danger rating system and the accompanying restrictions and prohibitions on both public and private lands. Under the system, restrictions and prohibitions regarding open burning, off-road vehicle use, smoking, fireworks, and equipment operation go into effect under "very high" or "extreme" rural fire danger forecasts. The rural fire

danger is forecast daily by the NWS. Electronic media outlets broadcast the daily forecasts, which, when activated, are also available on various websites, such as the NDDEM website www.state.nd.us/dem/info/firedanger.html; and the NWS websites www.crh.noaa.gov/data/BIS/RFDBIS; www.crh.noaa.gov/gld/fire_weather/.

Since 2002, Governor Hoeven has issued six drought and three fire-related declarations. These declarations have led to increased fire danger awareness, implementation of emergency loan programs from the U.S. Small Business Administration (SBA), agricultural assistance from the U.S. Department of Agriculture (USDA), and facilitated technical, operational and financial assistance to address water supply shortages for the cities of Parshall and Fort Yates.

On March 11, Governor Hoeven formally requested the USACE, Omaha District, to provide technical assistance, adjust their plans and procedures regarding lake level retention, to make available engineering and limnological expertise to investigate alternatives to depleting the lake's hypolimnion and to provide assistance in ensuring their public water systems have the capability to provide safe drinking water.

On February 18, 2005, the Governor's Chief of Staff reviewed the impacts of drought conditions with the Adjutant General (TAG) and representatives of the NDDoH, NDGF, NDSWC, NDPR the NDDEM.

On February 14, 2005, Fort Berthold Rural Water (FBRW) held an emergency water intake meeting to discuss the status of community intakes at Twin Buttes, Mandaree, White Shield and Four Bears and impact the low lake levels are having on these systems. It was agreed an assessment would be taken on intake locations and a contingency plan implemented. The Natural Resources Committee of the Three Affiliated Tribes directed FBRW to proceed with an assessment and take any necessary actions.

On February 8, 2005, Governor John Hoeven joined Governors Mike Rounds of South Dakota, Dave Heineman of Nebraska and Brian Schweitzer of Montana, as well as representatives of the remaining Missouri River basin states, in Sioux Falls, South Dakota to discuss efforts to resolve the ongoing issue of Missouri River management by the USACE. Governor Hoeven indicated the USACE will reduce the downstream navigation season under the new Master Manual by 61 days to conserve water. Downstream states were unwilling to support a further shortening of the season, but indicated a willingness to support a resolution maximizing all drought conservation measures allowable under the new Master Manual.

7. ASSISTANCE NEEDED: State officials are requesting the USACE to provide technical assistance, adjust its plans and procedures regarding lake levels retention, to make available engineering and limnological expertise to investigate alternatives to depleting the lake's hypolimnion and to provide

assistance in ensuring their public water systems have the capability to provide safe drinking water.

8. OUTSIDE HELP ON SCENE: State, USACE, and BOR officials have made periodic site visits.
9. OTHER INFORMATION: The N.D. Division of Emergency Management's Situation Reports are posted on the Division's Internet home page. The address is <http://www.state.nd.us/dem>.

Douglas C. Friez, State Director